

**Floodplain Statement of Findings
for the
Los Alamos County Waterline and
Pueblo de San Ildefonso Fiber Optic Cable
Los Alamos County, New Mexico**

AGENCY: U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA),
Los Alamos Field Office

ACTION: Floodplain Statement of Findings

DESCRIPTION OF THE PROPOSED ACTION: The first segment of the County's proposed waterline project consists of approximately 12,120 feet of a new water line that starts in White Rock adjacent to White Rock Fire Station #3 on the north side of NM 4, crosses under NM 4 to the south side, then follows the south and east side of the NM 4 right-of-way all the way to approximately 490 feet north of the Pueblo boundary onto DOE property, where it would tie into the previously described, recently completed segment. The second segment consists of approximately 4,400 feet of new waterline tying into the recently completed segment of waterline, approximately 1,300 feet north of the East Jemez Road intersection, and continuing north and then east along NM 4 to the interchange with NM 502 (where there is an existing waterline – red dashes on Figure 1), where it turns north (west of the interchange) and ties into the existing waterline located on the south side of NM 502 (Figure 1).

Construction of the waterline would consist of excavation of 60 to 100-foot length of trench at a time with a minimum depth of 48 inches to the top of the new waterline. This puts the total minimum trench depth at around 67 inches. It may be deeper in some locations where conditions require it. The trench would be wide enough for workers to get down into it on either side of the new pipe as it is installed to make the necessary connections and benched to prevent cave-ins. Excavated soils would be stockpiled to the side, away from the roadway until they are placed back into the trench, compacted, and graded. Concrete barrier wall would be temporarily installed between the edge of the NM 4 pavement and the trench to provide a safe work environment for both workers and drivers during construction.

Installation of the Pueblo's fiber optic conduit would begin at the waterline tie-in point by Fire Station #3 located in White Rock and be installed above and to the side of the new waterline. This process consists of backfilling and compacting the trench around and up to 12 inches above the new waterline, then laying the conduit down offset 12 inches from the nearest side of the waterline in the trench, backfilling over it, compacting the fill, and grading the surface. Where the new waterline reaches the tie-in point of the existing new waterline near East Jemez Road, the conduit would be placed in the ground by horizontal drilling at the same 12-inch elevation above the existing waterline until the starting point

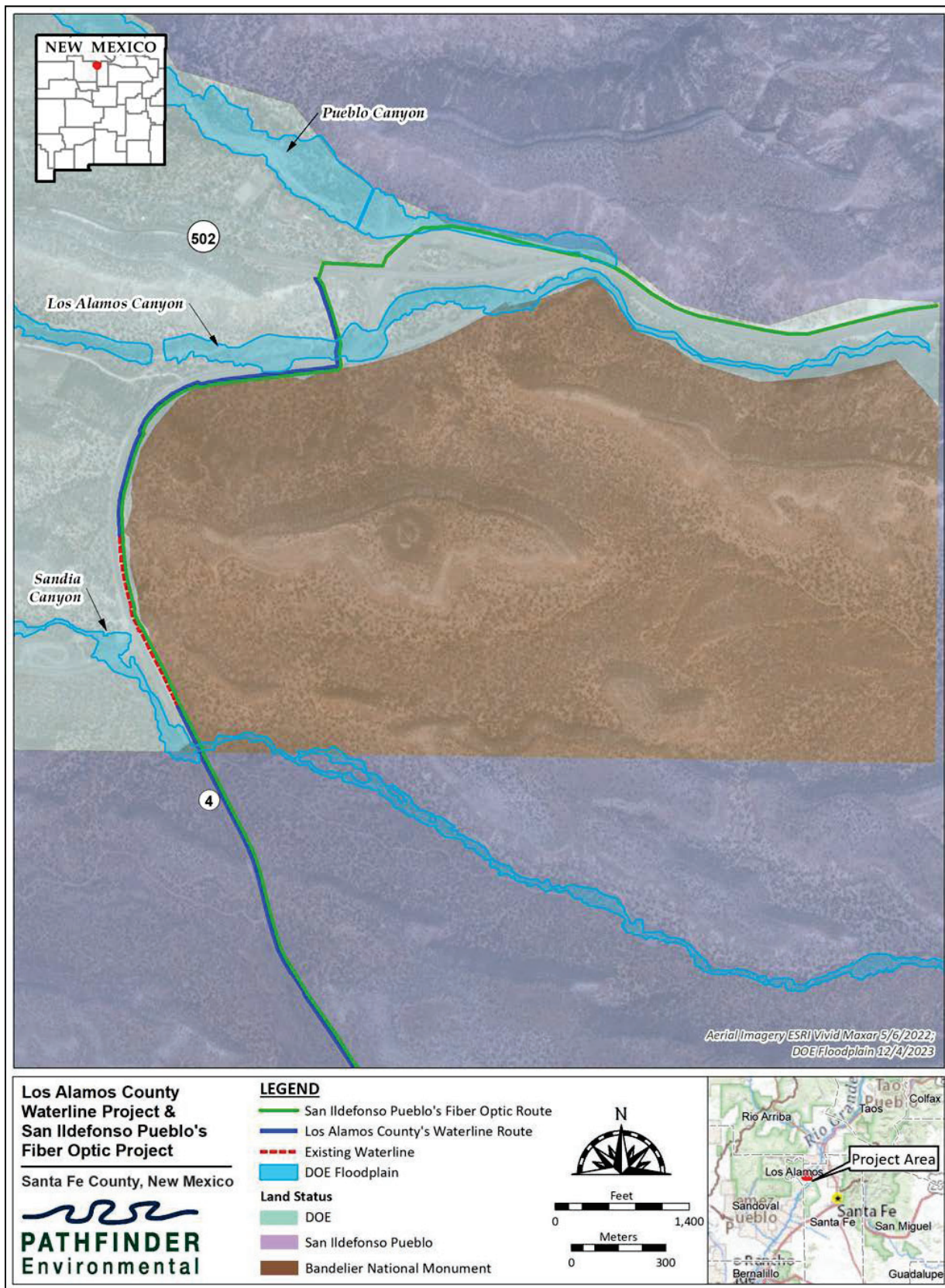


FIGURE 1. FLOODPLAIN MAP SHOWING THE ROUTES OF THE PROPOSED PROJECT ON DOE PROPERTY

for the second segment has been reached. From that point on to the end of the second segment of new waterline the conduit would be placed in the trench as before. At the tie-in point for the new waterline on NM 502, the conduit would then be routed under and to the north side of NM 502 to connect up with the portion of the project coming from the east along NM 502.

The fiber optic planned along the north side of NM 502 would be installed by a combination of horizontal drilling and trenching. Horizontal drilling minimizes surface disturbance by only requiring a hole where the drill rig is working and a few hand-dug potholes along the route to confirm the location of the drill bit. The drill would make a horizontal hole a minimum of 36 inches below the surface for distances of up to 450 feet, then conduit would be connected to the end of the drill bit and pulled back through the hole to the drill rig. The drill rig would then be moved up to the far end of the conduit, another hole dug, and the process would start over until the conduit has been installed for the entire length of the route. All holes would be backfilled when the drill rig is moved to the next drilling location.

Some segments of the route along NM 502 would need to be installed by trenching, due to the presence of basalt rock in the ground. These locations would be determined in the field during installation of the conduit. Trenching would involve excavation using a backhoe or possibly a mini-excavator capable of pulling or breaking up rock wherever it is encountered along the way. The trench would be a minimum of 36 inches deep. Daily progress would depend on how much hard rock is encountered along the way. The trench would be backfilled each day leaving the end of the conduit coming out of the ground and attached to its spool. No soils would be transported off site. Large boulders would be set to the side and clean fill would be brought in to replace the volume previously displaced by the boulders. If trenching is required in a flood zone, the boulders would be set off to the edge of the channel where they would not alter the flow of water during runoff events.

Since the proposed project is a new waterline and fiber optic conduit in a new trench, there would be no old infrastructure, pipelines and related debris, that will require removal and disposal.

LOCATION WITHIN A FLOODPLAIN EXPLANATION: The floodplain assessment is for work by Los Alamos County and by Pueblo de San Ildefonso where portions of the projects are located on DOE property. The project proposed by Los Alamos County and San Ildefonso Pueblo would cross Pueblo, Los Alamos, and Sandia canyons on DOE property. There are no practical alternatives that would avoid an action within the floodplain.

ALTERNATIVES: The alternatives available to the County and the Pueblo include the no action alternative. The no action alternative was not selected by the County or the Pueblo because the no action alternative would not provide for a reliable new water supply line to

White Rock, nor would it provide for high-speed broadband internet service to the Pueblo's gas station in White Rock.

The alternatives of using an existing abandoned waterline outside of the proposed project area as a conduit for the fiber optic cable or installing the conduit aerially on telephone poles were considered but not selected. These alternatives were determined infeasible after inspection of the existing waterline and geotechnical obstacles to telephone pole installation.

FLOODPLAIN PROTECTION STANDARDS: The proposed project would result in limited and minor short-term direct and indirect impacts to the Pueblo, Los Alamos, and Sandia canyons' 100-year floodplain and would not result in adverse impacts to the floodplain values or functions. Temporary disturbance within the floodplain would cease following completion of installation activities. Best management practices would be implemented. This proposed project would not significantly modify flow paths within the floodplain from pre-project conditions to post project conditions. No effects to lives and property associated with floodplain modifications are anticipated.

STEPS TO BE TAKEN TO MINIMIZE POTENTIAL HARM TO OR WITHIN THE FLOODPLAIN: Potential short-term direct and indirect floodplain impacts from release of pollutants to the floodplain and exposure to stormwater would be avoided or minimized through implementation of the following best management practices:

- Hazardous materials, chemicals, fuels, and oils would not be stored within the floodplain.
- Heavy equipment would not be used within a stream channel, especially if conditions are too wet to prevent damage to the soil structure.
- Equipment would be refueled at least 100 ft. from the three canyon floodplains.
- The proposed projects are not located in threatened or endangered species habitat; therefore, no impact will occur to current listed species in the Los Alamos County area.
- The federal law, Migratory Bird Treaty Act (MBTA), prohibits killing migratory birds, including nestlings and eggs. Migratory birds breed across LANL property. The County and the Pueblo have confirmed that no tree or shrub removal will occur as part of either of the two proposed projects; therefore, no impact will occur to birds protected by the MBTA.
- There are three recorded archaeological resources within 100 feet of the proposed waterline route on Laboratory-managed lands. The County or the Pueblo must provide notice to LANL Cultural Resources Program personnel by email at least 10 days prior to the start of work so that they can start work on site flagging and update activities in preparation for project activity within the proposed project area. An estimated 18 hours will be needed to complete flagging and site updates with additional time for any walkdowns. LANL archaeologists are required to be on site for monitoring when working within 50 feet of a recorded archaeological site boundary, regardless of the work being performed in the highway right-of-way. The County or the Pueblo must coordinate with the Cultural Resources Program to ensure a monitor is on site, prior to the start of work. During all ground disturbing project activities, contractors would PAUSE WORK IMMEDIATELY if they encounter bones (possible burials), clusters or alignments of rock situated above bedrock (possible masonry walls), charcoal stains (possible hearths or burned wooden structures), or clusters of artifacts such as pottery, pieces of chipped stone, and historic debris such as cans or glass. Contractors would immediately contact

the LANL Cultural Resources Program to notify them of the issue and arrange an emergency field inspection to be conducted prior to the resumption of project ground-disturbing activities.

- If either of the two projects would disturb over 1 acre of ground, then a National Pollution Discharge Elimination System Construction General Permit would be required. This permit requires controls to limit soil erosion, sediment loss, and spills and leaks during and after construction. Controls would include temporary perimeter controls to reduce sediment transport during construction, final stabilization to control erosion after construction activities are completed, and pollution prevention measures such as housekeeping and spill prevention. Any required vegetation stabilization will be completed in accordance with the County's Revegetation Plan for their project.
- The proposed projects would require compliance with the Energy Independence and Security Act, which would be the responsibility of the County and the Pueblo, and which require the maintenance or restoration, to the maximum extent technically feasible, the predevelopment hydrology of the site including using design and construction strategies for stormwater runoff. Standard Best Management Practices would be employed throughout project construction to control and prevent erosion during precipitation events. The principal ground-disturbing activity associated with these projects is trench excavation. These projects will employ a technique of backfilling and compacting the trench once the waterline and fiber optic cable conduit are in place as the project advances from the starting point to the end point.
- As commonly occurs with linear projects, the two proposed projects would result in disturbances within the channel of multiple drainages. As a result of the recent U.S. Supreme Court decision in *Sackett v. Environmental Protection Agency (EPA)* (Sackett 2023), ephemeral drainages, as defined by EPA in prior regulatory guidance, are no longer considered Jurisdictional Waters of the United States. Consequently, ephemeral drainages are no longer regulated under Sections 404 or 401 of the federal Clean Water Act and no permits or water quality certifications would be required for the locations where the two projects cross them. Presently the EPA and U.S. Army Corps of Engineers are in the process of ending the use of the terms ephemeral, intermittent, and perennial as they pertain to drainages and waterways and are developing definitions for "relatively permanent" and "non-relatively permanent" waterways in accordance with the ruling in the Sackett case. Where the proposed projects would cross formerly intermittent waterways, a Jurisdictional Determination by the U.S. Army Corps of Engineers would be required and if they are determined to be jurisdictional under the new definition of "relatively permanent" waterways, then excavation within the Ordinary High Water Mark (OHWM) of any such waterways would require a Clean Water Act Section 404 permit and Section 401 water quality certification prior to construction within those drainages. Of the three drainages traversed by the proposed projects, only the drainage in Pueblo Canyon along the north side of NM 502 appears to potentially be intermittent and only the proposed fiber optic project would traverse that drainage.
- All waste will be handled and/or disposed of in accordance with the LANL Waste Management Procedure P409.

The proposed projects would involve some disturbance of In-Progress Consent Order Sites C-00-005 [Pueblo Canyon system], C-00-006 [Los Alamos Canyon system], and C-00-007 [Sandia Canyon system]. Since the proposed projects cannot avoid disturbance to these Areas

of Concern (AOCs), the County and the Pueblo will contact the LANL Consent Order Site Coordinator prior to the execution of field work. Any disturbed soil from the AOC would be stabilized and managed within the AOC boundary and returned to the point of origin upon completion of the project. All excavated material would be maintained within the AOCs and none would be sent off site. The projects are required to take precautions to avoid inadvertently transporting potentially contaminated soil from the sites.

No long-term impacts to the floodplain are anticipated as a result of this project. Flow paths within the floodplain would not be modified from pre-project conditions to post project conditions.

SUPPLEMENTARY INFORMATION: A Floodplain Statement of Findings was prepared in accordance with Executive Order 11988, *Floodplain Management* and DOE implementing current regulations 10 Code of Federal Regulations 1022 *Compliance with Floodplain and Wetland Environmental Review Requirements* and provided a summary of the *Los Alamos National Laboratory Floodplain Assessment for Los Alamos County Waterline and San Ildefonso Pueblo Fiber Optic Cable* (Floodplain Assessment) analysis and determination.

The notification for the availability of the Floodplain Assessment and request for comments was sent to appropriate government agencies, tribes, organizations, and persons known to be interested in or potentially affected by the proposed floodplain action via the GovDelivery system and published online on February 22, 2024, for a 15-day public review and comment period on the DOE National Environmental Policy Act (NEPA) website at <https://energy.gov/nepa/articles/los-alamos-county-waterline-and-san-ildefonso-pueblo-fiber-optic-cable-floodplain> . Two people's comments were received and addressed in this statement of findings as required and appropriate. These comments were sent to the project team for consideration in project planning and implementation.

FOR FURTHER INFORMATION ON THIS STATEMENT OF FINDINGS CONTACT: For further information or questions regarding this Floodplain Statement of Findings contact Ms. Karen Armijo via email at Karen.Armijo@nnsa.doe.gov; fax (505) 667-5948 or mail to:

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